ON THE NON-MARINE MOLLUSCA OF A POST-PLIOCENE DEPOSIT AT APETHORPE, NORTHAMPTONSHIRE.

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We have twice recorded *Vertigo parcedentata* (A. Braun) as occurring in a fossil state at Stamford, Lincolnshire (Proc. Malac. Soc. Lond., vol. vii, pp. 119–20, 1906, and Quart. Journ. Geol. Soc., vol. lxviii, p. 236, 1912). This record was based on examples which had been found in shell marl given to one of us some years ago by the late Professor T. Rupert Jones, the box containing the marl being labelled "Stamford, from S. P. Woodward". In the course of correspondence with Mr. W. R. Horwood, of the Leicester Museum, he kindly pointed out that this is without doubt the material described by the donor in 1881. The account is as follows: "From the grey marl of an old lake-floor in a valley near Apethorp, not far from Stamford, on which a Roman station (discovered in 1859) had been established, though subject to inundation; the following freshwater shells and other organisms were found by Mr. John F. Bentley. They were named by Dr. S. P. Woodward," and a list of thirty-two species is given (Proc. Geol. Assoc., vol. vi, p. 213, footnote, 1880).

Although the amount of material was small, yet we have been able to determine thirty-eight species, viz.:—

Vitrea crystallina (Müll.), 6 examples.
Polita cellaria (Müll.), 7 examples.
P. radiatula (Alder), common.
Zonitoides nitidus (Müll.), 1 example.
Euconulus fulvus (Müll.), 5 examples.
Punctum pygmæum (Drap.), 10 examples.
Pyramidula rotundata (Müll.), common.
Helicella itala (Linn.), 2 examples.
Hygromia liberta (West.), common.
Acanthinula aculeata (Müll.), 5 examples.
Vallonia pulchella (Müll.), common.
V. costata (Müll.), common.
V. excentrica, Sterki, common.
Arianta arbustorum (Linn.), 4 examples.
Cochlicopa lubrica (Müll.), common.
Cæcilioides acicula (Müll.), 4 examples.
Pupilla muscorum (Linn.), common.
Vertigo antivertigo (Drap.), 10 examples.
V. substriata, Jeff., 4 examples.
V. pygmæa (Drap.), 5 examples.
V. parcedentata (A. Braun), common.
V. pusilla, Müll., 1 example.
V. angustior, Jeff., 1 example.

Clausilia laminata (Mont.), 2 examples.
C. bidentata (Ström), 1 example.
C. rolphii, Leach, 2 examples.
Succinea elegans, Risso, 6 examples.
Carychium minimum, Müll., common.
Limnæa pereger (Müll.), 3 examples.
L. palustris (Müll.), 1 example.
L. truncatula (Müll.), common.
Planorbis leucostoma, Millet, common.
P. crista (Linn.), 2 examples.
Physa fontinalis (Linn.), 2 examples.
Bithynia tentaculata (Linn.), common.
Valvata cristata, Müll., 1 example.
Acicula lineata (Drap.), 6 examples.
Pomatias elegans (Müll.), 4 fragments.

Two species previously recorded, *Hygromia striolata* (Pfr.) (=*Helix rufescens*, auctt., *non* Penn.) and *Bithynia leachii* (Shepp.), are missing, and these records are very doubtful. All the larger forms are represented either by immature examples or by fragments, but the large size of the smaller species is noteworthy, showing clearly that the environment was congenial to the Mollusca. The comparative abundance of *Vertigo parcedentata* is interesting, since in the three other British deposits in which it occurred it was decidedly rare. No stratigraphical evidence is available to fix the age of the deposit, so one must rely solely on the Mollusca. There is only one extinct species, *V. parcedentata*. In these Islands it is only known elsewhere from Elie, Fifeshire, and Ponders End and Angel Road, Middlesex. The first-named is early Holocene, the two latter, really one deposit, late Pleistocene. The whole facies of the Apethorpe Mollusca is so different from that of the Lea Valley beds that it cannot be correlated with them, whilst the great difference in the latitude prevents any comparison with the Scotch deposit. We are, however, inclined to think it is late Pleistocene, and belongs to some part of that vast period of time which elapsed between the deposition of the Crayford brickearths and the Glacial Period, which latter marks the end of the Pleistocene.